

CORRELATION BETWEEN MICRONUCLEUS AND MULTINUCLEATED LYMPHOCITES IN MEDICAL PERSONEL EXPOSED TO RADIATION

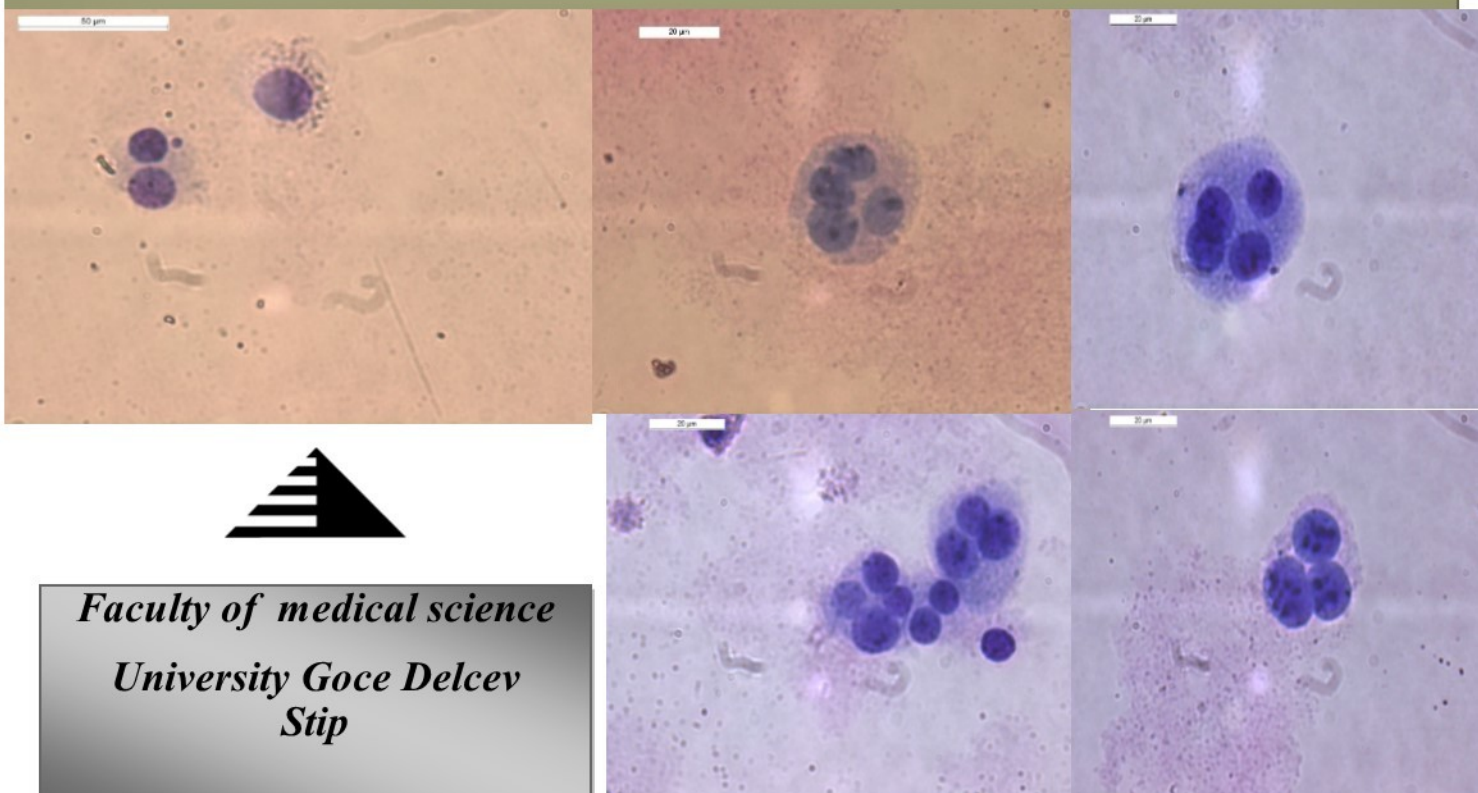
Velickova, N., Milev, Petrova, B., Nedeljkovic,
B., Gorgieva, P.

Introduction: Measurement of micronucleus (MN) frequency in peripheral blood lymphocytes (PBL) is extensively used in molecular epidemiology and cytogenetics to evaluate the presence and the extent of chromosomal damage in human populations exposed to genotoxic agents. The observation that chromosome damage can be caused by exposure to ionising radiation can cause major alterations to the genetic material.

Aim of the study: To evaluate the results of lymphocyte micronuclei, and polynuclear lymphocytes, necrosis, and apoptosis on the medical personnel occupationally exposed to ionizing radiation.

Material and methods: The study included 10 individuals, radiologists who are 20 and \pm 5 years occupationally exposed to radiation. For evaluation for micronucleus we used micronucleus assay.

Results: In the present study it is evident that an increase in the baseline MN frequency and multinucleated lymphocytes. Also we find other cytological changes corresponds to the increase chromosomal damages in the cells.



*Faculty of medical science
University Goce Delchev
Stip*